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STATE OF CALIFORNIA

Energy Resources Conservation And Development Commission

In the Matter of:)	Docket No. 00-AFC-3
)	
Application for Certification)	APPLICANT’S RESPONSE TO
for the EM-One Power Station’s)	CITY OF SOUTH GATE’S
NUEVA AZALEA POWER PLANT PROJECT)	FIRST AND SECOND SETS OF
(Sunlaw Energy Corp.))	DATA REQUESTS
)	
)	JANUARY 9, 2001
)	
_____)	

Applicant EM-One Power Station LLC (“Applicant”) hereby responds to South Gate’s First and Second Sets of Data Requests as follows:

RESPONSE TO SOUTH GATE FIRST SET OF DATA REQUESTS

Technical Area: Land Use

L-1 *Please submit a Land Use and Development Application for a Site Plan Review to be considered by the City of South Gate, pursuant to Title 11, South Gate Municipal, Chapter 11.41 in order for the City of South Gate to determine whether, or not, the proposed project will comply with all applicable development standards and General Plan policies.*

Response

Applicant already has prepared this Application. Please see Applicant's Supplemental Response to CEC Staff Data Request No. 101 (dated December 15, 2000).

L-2 *In order to adequately assess conformance with the City of South Gate's General Plan policies, please submit a complete analysis of all pertinent policies and the proposed project's consistency with these policies.*

Response

Overview:

The South Gate General Plan contains a strong emphasis on improving the economy within the City and the City's financial health. The General Plan recognizes that the City already contains substantial industrial activities and that additional industrial growth is a key way to accomplish the City's economic goals. The Plan also recognizes that the substantial existing truck activity within the City produces some undesirable effects, including pollution, noise, traffic congestion and street damage.

The proposed Nueva Azalea project is located within the South Gate Triangle Planning Area (Planning Area 7) and within an area designated as Mixed Use Commercial/Industrial. The project also is located within Redevelopment Plan Area 3. According to the City's General Plan, this area has been in industrial use for an extended period of time. Under the General Plan, future development of industrial activities is encouraged within this area.

The following are the specific Goals and Policies set forth in the South Gate General Plan that are most relevant to the Nueva Azalea project, as well as a discussion of the consistency of the project with the applicable Goals and Policies:

Community Development Element:

Goal 4: Maintain a strong and diversified industrial base to contribute to the economic well-being of the city and its residents.

The Nueva Azalea project is consistent with, and will further, this goal in bringing a new type of industrial activity to the City. The Nueva Azalea project represents a major diversification in the industrial base of the City, which will contribute very substantially to the economic well-being of the City and its residents through contribution to the tax base, expenditure of money to purchase good and services, and employment opportunities. (These benefits have been detailed in the AFC, in responses to prior Data Requests of other parties, and elsewhere.)

Policy 4.2: The City should continue an active role in attracting those industrial activities which are beneficial in terms of employment and revenue to the City and the surrounding region.

Nueva Azalea will play a major role in providing a substantial new source of revenue to the City and also in providing opportunities for employment. (These benefits have been detailed in the AFC, in responses to prior Data Requests of other parties, and elsewhere.)

Policy 4.3: The City should make an effort to exclude those industrial and warehousing facilities activities benefiting the City which would be outweighed by any detrimental environmental impacts such as truck traffic, air pollution, and noise.

The Nueva Azalea project is consistent with, and will further, this policy. By replacing the JB Hunt Truck Terminal with the project, a major source of diesel exhaust air pollution, noise and traffic will be eliminated from the City. The environmental impacts of the Nueva Azalea project have been examined very carefully. This analysis shows that there are no significant environmental impacts from air pollution, noise or otherwise. (Please refer to analysis in the AFC, in responses to Data Requests, and other materials.) To the extent that the concern expressed in this Policy is founded on a concern for public health of South Gate residents, the impacts of the Nueva Azalea project have been shown to be far below levels of health concern, while, in comparison, the health risks from the existing JB Hunt terminal have been shown to far exceed those of the project and to pose a significant health risk. (See, e.g., Supplemental Response to CEC Data Request No. 48 and Supplemental Response to CBE Data Request No. 40.)

Infrastructure Element:

Policy 1.5: Commercial vehicle travel in all non-commercial areas will be minimized as much as possible.

The Nueva Azalea project is consistent with, and will further, this policy. The existing JB Hunt terminal commercial vehicles (primarily trailer-trucks) utilize City streets in residential areas to some extent. (See, traffic study previously submitted.) Once construction of Nueva Azalea is completed (construction is approximately a 20-month process), the Nueva Azalea project will involve far fewer daily truck trips than does the current site use. Even during construction, use will not be substantially different than the current JB Hunt use, which involves hundreds of truck trips per day.

Policy 1.8: Private and public parking shall be provided in sufficient amount to adequately meet local needs and to minimize congestion on arterial streets.

Nueva Azalea is consistent with this policy. Parking will be provided on-site.

Housing Element:

Policy 2.5: The existing mobile home development, located in the South Gate Triangle planning area, shall be maintained.

The project is consistent with this policy, particularly in light of the inclusion of a sound wall between the mobile home park and the freeway, which will reduce noise impacts to these residents from the freeway. (Note that the soundwall is not included in the project to mitigate project noise levels, which already are below any level of significant impact, but rather have been included in the project to provide a benefit to these residents.)

Resource Management Element:

Policy 1.1: Encourage the conservation of water resources in residential, commercial, and industrial development.

The Nueva Azalea project is consistent with this policy. The project will use reclaimed water for the vast majority of its total water needs (for the cooling tower). The plant also recycles and reuses much of its water in repeated cycles, and will not involve significant landscaping requiring irrigation.

Policy 1.5: Support the efforts, goals and plans of the South Coast Air Quality Management District in reducing the level of air pollution in the Southern California region.

The Nueva Azalea project meets all of the SCAQMD's most stringent permit limits. Further, by displacing older existing power plants within the Basin, which are both much more polluting and much less efficient, and by setting new lower BACT/LAER levels for several pollutants (which will then have to be met by other facilities in the Basin), the project will further the SCAQMD's plan to improve air quality in the Basin. Thus, the project will further the City's policy of supporting the SCAQMD's efforts to improve air quality of the LA Basin.

Noise Element:

Policy 1.1: Construct barriers to mitigate sound emissions where necessary or where feasible.

As noted above, there are no significant noise impacts from the Nueva Azalea project. The General Plan notes that vehicle noise is one of the major sources of noise in the City, particularly the freeway noise. The proposed soundwall adjacent to the mobile home park is a beneficial feature of the project in this regard.

Policy 2.2: Ensure acceptable noise levels near schools, convalescent homes, and other noise sensitive areas.

The Nueva Azalea project is consistent with this Policy. There are no significant noise impacts from the project at the nearest areas of this type.

Policy 2.4: Encourage acoustical design in new construction.

The Nueva Azalea project design incorporates noise limiting design features, including the enclosure of the turbine units within confined structures, which reduce noise emissions.

Economic Development Element:

Goal 1: Increase Industrial Development in the City of South Gate.

As a new industrial facility, Nueva Azalea is consistent with, and furthers, this Goal.

Policy 1.1: Continue to create additional industrial facilities within existing redevelopment projects with emphasis on the re-establishment of the General Motors site as a major industrial force in the community. Seek new industrial development in other sites including the drive-in theatre and Armstrong-Cork properties.

The Nueva Azalea project, as a new industrial facility within the existing Redevelopment Project Area 3, is consistent with, and will further, this Policy.

Policy 4.1: Encourage manufacturing and R&D industrial development and commercial development.

The Nueva Azalea project, as a manufacturing facility, is consistent with, and will further, this policy.

RESPONSE TO SOUTH GATE SECOND SET OF DATA REQUESTS

Technical Area: Air Quality

A-1. *The City of South Gate is concerned with the proposed project's estimated PM-10 emission levels and the lack of available technology or a mitigation plan to offset proposed emissions. The City does not believe that an interpollutant offset plan (VOC's for PM-10 as proposed by the Applicant in conjunction with the South Coast Air Quality Management Districts) will fully mitigate the plant's emission within the community of South Gate. Please provide evidence that an interpollutant offset would result in a net benefit in PM-10 levels in the local community or describe the Applicant's plan to reduce PM-10 emissions within the City of South Gate as a condition of approval of this project.*

Response to Background

Applicant does not normally comment on the Background information supplied by a party with its Data Request, since the Background section is not part of the Request. However, with this Data Request, the Background information supplied by South Gate contains some incorrect information. Please see the comments below:

1. The Nueva Azalea Project ("NAP") AFC contains a requested permitted limit of 1.0 ppm NO_x at 15% O₂, not 2.5 ppm as stated on page 2, line 21 of the Request.
2. The Lynwood air monitoring levels are at ambient oxygen levels and not at 15% O₂ concentrations.
3. The conclusion at the end of the first paragraph (page 2, line 22 and 23) therefore cannot be made.

4. The requested CO permit limit for the NAP is one half of one ppm (.5 ppm), not 6 ppm as stated on page 2, line 25 and 26.
5. The conclusion at the end of paragraph #2 (Page 3, line 2 and 3) is therefore incorrect.
6. The VOC permit limit for NAP is .2 ppm, not 5 – 10 ppm as stated on page 3, line 7 of the Request.
7. SCONOx does reduce PM10 from the exhaust of the gas turbine train, as do other components of the system such as the inlet filters and the evaporative cooler. The statement on line on page 3, line 9 is therefore incorrect. Similarly, the statement that SCONOx will contribute to PM10 emissions is not correct.
8. The conclusion on page 3, lines 17 – 21 is therefore not correct.
9. The project emits (not generates) a maximum of 73.3 tons of PM10 per year, not 144 tons as stated on page 3, line 25 of the Request.

Response to A-1

Interpollutant trade-offs are part of the SCAQMD's offset plan and therefore part of the SCAQMD's US/EPA-approved State Implementation Plan (SIP). PM10 has continued to improve within the SCAQMD over the last fifteen years and the lower emission rates being requested by the NAP will further help this reduction by setting new, lower BACT/LAER levels for all future power plant sources.

Whether through inter-pollutant or direct-pollutant offsets, the SCAQMD's offset program requires a greater than 1-to-1 ratio of offsets to emissions. Thus, the offset program directly addresses offsetting emissions from new sources such as NAP.

NAP has proposed the interpollutant trade of VOCs for PM10 offsets and is awaiting analysis of this proposal from the SCAQMD. NAP also is exploring other means of providing offsets to meet SCAQMD requirements.

NAP already incorporates into its design (through SCONOx and other means) PM10 reduction technologies. (Currently, the BACT recognized by US/EPA is the use of natural gas without SCONOx's additional PM10 reduction effects.) The PM10 emissions from NAP have been carefully analyzed (see other data responses) and shown to fall well below the significant impact threshold for a new sources under the SCAQMD's regulatory program. These threshold levels were set conservatively in order to ensure that a new source poses no health risk to the surrounding communities. Therefore, with the SCAQMD offset requirements met, there is no need for further mitigation of PM10 emissions.

A-2. In addition, please provide evidence that all available technologies and mitigation options have been fully investigated by the Applicant and that there are no other possible means to reduce PM-10 emissions within the City of South Gate as a condition of approval of this project.

Response

As noted in Response to Downey Data Request A-1, NAP already incorporates all feasible PM10 mitigation technology into the project. These technologies include the use of natural gas as a fuel source, use of SCONOX, use of an inlet air filter on the gas turbine, the evaporative cooler on the gas turbine air inlet, the use of a cooling tower, and the drift eliminators on the cooling tower.

As further noted in that Response, the NAP PM10 emission levels are well below significant impact thresholds and will be more than offset under the SCAQMD's offset program. As part of its efforts to obtain offsets, NAP has attempted to locate potential PM10 offset sources throughout the entire SCAQMD coastal zone sub-basin, and to date has been unable to purchase existing PM10 offsets or identify potential new PM10 offset sources anywhere in the coastal zone sub-basin. These efforts were described in previous data responses to other parties. As noted above, these efforts are continuing.

A-3. Please provide specific information on the filter that is proposed for the intake to the combustion turbine, such as PM-10 control efficiency as a function of particle size, and pressure drop across the filter. Also, will the filter reduce air flow to the combustion turbine such that performance would be affected?

Response

The gas turbine inlet system will contain a two-stage air filter system that is manufactured by ABB. Donaldson Filtrations Solutions provides air filter cartridges for these types of systems. The cartridges would like be made out of Duratek™, which is a blend of man-made and natural fibers designed to resist moisture. The system is designed to remove at least 99% of the particles that are one micron or larger and about 97% of the particles between .5 and 1.0 microns. The pressure drop across the filters is designed to cause less than 2" H₂O. That pressure drop results in about 1.5% loss of power output and a loss of about .5% efficiency.